



# Space News Roundup

Vol. 32 November 1, 1993 No. 43

## Record-setting flight brings 'excellent' data

**By Eileen Hawley**  
Following a successful space flight exploring the effects of microgravity on the human body, the crew of the Spacelab Life Sciences-2 mission was preparing for landing today. Investigators on the ground were reporting "excellent" scientific data which complemented and validated scientific data received from the earlier SLS-1 mission in July 1992. The space shuttle *Columbia* was scheduled to land today at 9:06 a.m. JSC time at Edwards Air Force Base, conditions permitting. "We are continuing to get an excellent set of scientific data from the SLS-2 experiments. I think that this mission really validates the Spacelab as a real laboratory in space for real research," said Dr. Frank Sulzman, SLS-2 program scientist. The STS-58 flight crew—Commander John Blaha, Pilot Rick Searfoss and Mission Specialist Bill McArthur—will return to a welcome home ceremony scheduled later today at Ellington Field, about 10 hours after landing. If landing occurs



on schedule, the ceremony should begin around 7 p.m. For updates on landing and crew return times call the JSC Employee Information Service at x36765. The payload crew—Mission Specialists Rhea Seddon, Shannon Lucid and David Wolf and Payload Specialist Marty Fettman—will be taken to a JSC medical facility for extensive post-flight medical evaluations. These medical tests will measure rates of readaptation to a gravity environment. Experiments conducted during the record setting 14-day mission measured the effects of microgravity on human cardiovascular, regulatory, neurovestibular and musculoskeletal systems. Eight of the 14 experiments conducted on board the Shuttle used the astronauts as subject while the remaining six used the 48 rodents carried in the spacelab. Since turnover of muscle protein in rats is much more rapid than in humans, two-weeks exposure to weightlessness for the rodents is Please see **STS-58**, Page 4



The STS-58 crew takes questions from the news media during an in-flight news conference last week. Front left to right, Rick Searfoss, John Blaha, Rhea Seddon and Bill McArthur. Top left, Dave Wolf, Shannon Lucid and Marty Fettman.

## More shuttle flights to Russian Mir planned

The United States will send as many as 10 shuttle missions to the Russian space station Mir as a first step to increased U.S.-Russian cooperation in the international space station and potentially other programs, NASA Administrator Daniel Goldin announced in an appearance last Wednesday at Space Exploration '93 at South Shore Harbour Convention Center. The proposed shuttle-Mir missions are part of a detailed plan on U.S.-Russian space cooperation that Goldin will present to the White House in the next several days. Despite political pressures and economic upheaval, the Russian people are determined to continue to explore, Goldin told the conference participants. "They are proud of their space program. It is an important part of their national culture," he said. Goldin contrasted the Russian view of space with the nine years of congressional budget battles over an international space station. "The station is constantly in question, it

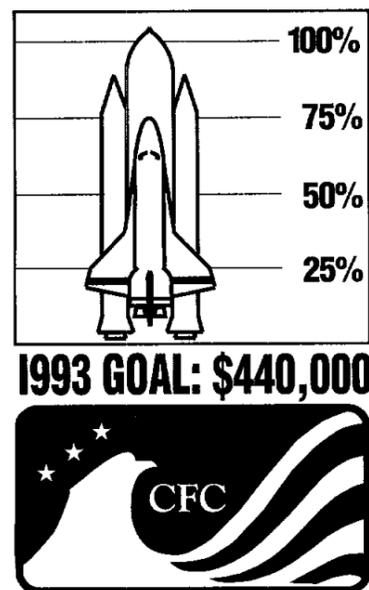
seems. But the Russians know, and we should know, that it is without a doubt exactly the kind of facility you have to build if you want to have any kind of a robust future in space," Goldin said. Visits to the Mir station would allow U.S. astronauts to spend as much as six months in space, allowing NASA to accumulate experience on long duration missions while working in parallel with current international partners on development of a redesigned space station during the next decade. The new proposal expands on earlier plans to fly one shuttle mission to Mir. That mission would pick up a NASA astronaut, who had arrived aboard a Russian Soyuz, after a three month stay. Goldin said he hoped President Clinton will reach a decision on proceeding with the joint U.S.-Russian space venture by the end of the year. The Space Exploration '93 conference is sponsored by the NASA Alumni League.

## Honoraria ban lifted—for now

JSC federal career employees once again can accept payment for their articles, speeches and appearances that are unrelated to their NASA business, at least for the time being. But employees shouldn't be too hasty in cashing that check, JSC Chief Counsel Hank Flagg cautions. A federal court of appeals decision invalidated the statutory ban on career employees accepting honoraria for articles and speeches on matters outside of their official duties, effective Sept. 28. In addition, the government cannot prevent executive branch employees from accepting honoraria placed in escrow or deferred in accordance with federal ethics laws, Flagg said. However, the U.S. Solicitor General has until Dec. 20 to file an appeal of the ban lift with the Supreme Court. If further review is sought in the Supreme Court and the court of appeals decision is reversed, employees who accepted honoraria during this interim period could have administrative and/or civil action taken against them, he warned. "To avoid those possible adverse consequences, my best advice to employees who are eligible to receive honoraria during the interim period is for them to have the honoraria placed in escrow or deferred until this issue is finally disposed of by the federal courts," Flagg said. To date, no decision has been made to take the issue to the Supreme Court or about what, if any, actions would be taken against employees who accepted honoraria if the ban is reinstated. Employees with questions regarding honoraria acceptance should contact the Legal Office at x33021.

## Congress okays \$14.5 billion NASA 1994 spending bill

**By Audrey Schwartz**  
Congress approved and sent to the president an \$87.7 billion VA, HUD and Independent Agencies appropriation bill last week that includes full funding for space station but cuts three NASA programs. The budget bill terminates the Advanced Solid Rocket Motor and the High Resolution Microwave Survey, formerly called Search for Extra-Terrestrial Life, programs and cuts \$19 million from the Advanced X-ray Astrophysics Facility-S, the third of four NASA planned Earth-orbiting "Great Observatories." The spending measure provides a total of \$14.5 billion for NASA programs in 1994, representing a 1.4 percent funding increase from last year's \$14.3 billion appropriation. Congress appropriated \$7.5 billion for research and development, \$4.8 billion for space flight control and data communications, \$517 million for cost of facilities that includes a \$32.5 million cut from the ASRM-related request, and \$15.4 million for the inspector general. Spending for research and program management areas, including civil servant salaries, is allotted \$1.64 billion, a cut of \$39.5 million from requested funding. Congress directed that NASA civil servant employment not exceed 22,900 full-time equivalents by the end of the 1994 fiscal year. NASA's workforce currently stands at nearly 24,000 full-time equivalents. Included in the NASA package is Please see **NASP**, Page 4



## Combined Federal Campaign begins

JSC kicked off its 23rd annual Combined Federal Campaign on Thursday, establishing a goal of \$440,000 for 1993. "Sharing is caring for today and tomorrow" is the theme of this year's Combined Federal Campaign of the Texas Gulf Coast, of which JSC's efforts are a part. Charlie Gott of the Automation and Robotics Division helped to create the 1993 theme. The CFC, which runs through Nov. 20, is a once-a-year voluntary fund-raising effort that gives JSC employees a chance to contribute to local, national and international health and welfare charities. "I know that JSC employees care, and it is my sincere hope that you will contribute as liberally as possible to this deserving campaign," Acting Center Director Paul J. Weitz said. "It is good to remember that you will not only be helping your community to help itself, you may be helping a neighbor or loved one when they need it most." More than 1,200 national and local charitable agencies have met eligibility standards established by the Office of Personnel Management and are included in this year's campaign. "Two of these are of special interest to JSC employees," JSC CFC Coordinator Teresa Sullivan said. "The NASA College Scholarship Fund offers educational grants to selected NASA dependents, and Space Family Education provides quality day care for children at JSC." Last year, JSC employees gave more than \$440,000 of the \$2.1 million contributed by federal employees throughout the Houston area. This year's community United Way goal is \$60 million, and the total CFC goal is \$2.2 million. Sullivan said additional incentives are offered this year for CFC contributions. Employees who contribute to the 1993 campaign will receive a coupon good for a \$2 discount on a Space Center Houston ticket, and each employee who gives through payroll deduction will receive one free child's ticket to the visitor center. Employees who contribute the equivalent of one-hour's pay per month will receive a CFC lapel pin and one free adult ticket to Space Center Houston. Employees who pledge at least two-hour's pay will receive a CFC lapel pin, a coffee mug and a free Space Center Houston adult ticket. For an annual pledge of \$600 or more, employees will receive a child's original art drawing and two free Space Center Houston adult tickets. Space Center Houston donated the discounts and tickets as a community service to the CFC. In addition, each employee who contributes at least one-hour's pay per month to the 1993 campaign Please see **CFC**, Page 4

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## Ticket Window

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday. For more information, call x35350 or x30990.

EAA Texas Renaissance Festival Bus Trips — Nov. 13, includes bus transportation and admission: adult, \$16; child (5-12), \$11; child (under 5), \$7.

Texas Renaissance Festival — Weekends through-Nov. 14. Discount tickets: adult, \$9.95; children 5-12 years, \$5.95.

"A Tuna Christmas" — 2 p.m., Sunday, Dec. 19 at the Cullen Theater. Tickets on sale through Nov. 5 - \$18, deposit required at time or order.

Entertainment '94 Coupon Books — Bay Area/Galveston/Downtown or FM 1960/Downtown: \$30 each, \$1 off first book for civil servants.

Space Center Houston — Discount tickets: adult, \$7.50; child (3-11), \$4.50; commemorative, \$9.95.

Metro tickets — Passes, books and single tickets available.

Movie discounts — General Cinema, \$4.50; AMC Theater, \$3.75; Loew's Theater, \$4.

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## Gilruth Center News

Sign up policy — All classes and athletic activities are first come, first served. Sign up in person at the Gilruth Center and show a NASA badge or yellow EAA dependent badge. Classes tend to fill up two weeks in advance. For more information, call x30304.

EAA badges — Dependents and spouses may apply for photo identification badges from 6:30-9 p.m. Monday-Friday. Dependents must be between 16 and 23 years old.

Weight safety — Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Nov. 3. Pre-registration is required. Cost is \$5.

Defensive driving — Course is offered from 8:15 a.m.-3 p.m. Saturday. Next class is Dec. 4. Cost is \$19.

Aerobics — High/low-impact class meets from 5:15-6:15 p.m. Tuesdays and Thursdays. Cost is \$32 for eight weeks.

Exercise — Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

Aikido — Martial arts class meets from 5-7:30 p.m. Tuesdays. Cost is \$15 per month.

Fitness program — Health Related Fitness Program includes a medical examination screening and a 12-week individually prescribed exercise program. For more information, call Larry Weir at x30301.

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## Swap Shop

Swap Shop ads are accepted from current and retired NASA civil service employees and on-site contractor employees. Each ad must be submitted on a separate full-sized, revised JSC Form 1452. Deadline is 5 p.m. every Friday, two weeks before the desired date of publication. Ads may be run only once. Send ads to Roundup Swap Shop, Code AP3, or deliver them to the deposit box outside Rm. 147 in Bldg. 2. No phone or fax ads accepted.

### Property

Sale: Friendswood, rustic country 3-2-2 on wooded 3.6 ac, pond, atrium, separate workshop, solar, satellite, never flooded, 2400 sq ft, \$160k. Jim, x39229 or 482-7873.

Sale: Colorado Springs, CO area, 5 wooded acres on hill crest, view of Pikes Peak and eastern plains. Don, x48881.

Sale: Friendswood, Windsong Subdivision, 3.7 ac, wooded on creek, owner will finance, \$60k. Jim, x39229 or 482-7873.

Lease: Pasadena TH, 2-2.5-2cp, swimming pool, \$550/mo + \$350 dep, water bill paid. Jim, x38624 or 475-9671.

Lease: Lakeshore condo, 2-2, new carpet/paint, \$485/mo. 326-4938.

Sale: Sagemont, 3-2-2, both formals, FPL, new carpet/roof. Ben, x34339 or 481-1439.

Rent: Bay Pointe Clear Lake area, one room in new home, prefer responsible non-smoker male, \$300/mo + 1/2 util. Tuan, x44361.

Sale: Deer Park, 2-1-1, CA/H, appliances, tenant occupied, low \$40's. 282-6909 or 476-5817.

Rent: Taos, NM ski area house near town, mountain view, sleeps 4, w/ly rentals. 532-2082.

Rent: Breckenridge, CO ski house, sleeps 12, view of ski slopes. Larry 303-482-9124.

Lease of Sale: Westwood Mall area condo, 2-2, all appliances, c'fans, balcony w/storage closet. 486-5239.

Rent: Heritage park, 3-2-2, cul-de-sac, FPL, fenced. Geno, x44867 or 992-2156.

Sale: Shoreacres, 4-2-2, 1850 sq ft, custom drapes, new vinyl, incl additional wooded lot, \$89k. 470-2592.

Rent: Galveston condo, furnished, sleeps 6, wknd/wkly/dly rates. Magdi Yassa, 333-4760 or 486-0788.

Sale: Piper's Meadow, 4-2.5-2, ex cond, new carpet/vinyl, fans, miniblinds, gar door opener, immediate occ. Wayne, x36617 or 291-9020.

Sale: Cancun, Mex, 5-star resort, 2-2, Nov 13-20, '93, was \$1400, now \$650. 992-3876.

Rent: Southern Colorado, 2 BR, sleeps 5, no smoking/pets, day/wk/mo or longer. Bob, x30825 or 998-7372.

Rent: Arkansas cottage on Blue Mountain Lake, furn, wooded, 4 acres, screened porch, \$250/wk, \$50/day. x33005 or 334-7531.

Sale/Lease: Nassau Bay, 4-2-2, recently remodeled, gas, big trees, lake view,

\$114.5k/ \$850. Minh, 333-6806 or 484-2456.

Sale: LC, Meadowbend, 4-2-2, FPL, c'fans, new landscape/paint, \$70.9k nego, assum. Peter, 526-1853.

### Cars & Trucks

'88 Jeep Wrangler 4X4, Sahara pkg, 6 cyl, hard top, A/C, AM/FM/cass, cruise, tint, 61k mi, ex cond, \$10k. 334-1119.

'81 Dodge Colt, wrecked, no engine head, sell parts or whole car. Herman, x35095 or 409-389-2461.

'81 Corvette, hi performance, 4 spd, mirror T-tops, 75k mi, custom striped paint, \$12k OBO. x33765 or 326-1390.

'85 Ford F150 PU, 350 V8, auto, A/C, tow pkg, blue/white, good cond, \$2,950. 283-1080 or 334-3097.

'84 Audi 4000s, engine good, needs brake work, \$1.2k OBO. x32064 or 474-5636.

'88 Chevrolet Sprint, 72k mi, tint, A/C, AM/FM, stand trans, \$3.3k. x39725 or 488-4660.

'91 GMC Sierra Sportside, white, V8, 4 spd auto, alarm, alum wheels, all pwr, loaded, ex cond, \$12.9k. x31250 or 280-8421.

'85 Toyota LB PU, 5 spd, camper shell, AM/FM/cass, ex mech cond, \$2.5k. 486-9391.

'78 Cadillac, 2 dr, CB, AM/FM stereo, burandy w/white vinyl top, clean, runs good, \$1.1k OBO. 943-8788.

'88 Dodge conversion van, B250, V8, loaded, well maintained, one owner, \$7,490 OBO. 482-4704.

'91 RX-7 Turbo, 18k mi, clean, leather int, new tires on back. x47985 or 482-6643.

'77 Toyota Chinook R/V, sleeps 3, heater, 3-way refrigerator, A/C, 2 burner stove, ex cond, \$4,245 OBO. 333-2468.

'80 Buick Regal, 6 cyl, ex tires, A/C, AM/FM/cass, pwr windows/door locks, no rust, \$1,545 OBO. 333-2468.

'81 Olds Cutlass, 4 dr, 63k mi, orig owner, loaded, \$1.4k. Jack, x33741 or 488-1222.

'91 Mustang, LX, 5.0L, sunroof, loaded, 31.7k mi, \$9.7k. x31004.

'80 Datsun B-210 station wagon, white, new battery/carb, 5 spd, \$750 OBO. Ray, x41010.

### Boats & Planes

Surfboard, Natural Arts Thruster, \$210. David or Bill, 554-6242.

14' V-hull aluminum boat w/'85 9.9HP Chrysler and trlr, \$700. Connie, 480-0014 or 476-4306.

'87 VIP Volante, 21', 260 Mercruiser I/O, Alpha 1 outdrive needs repair, open bow, interior and engine in ex cond, trlr, \$6.5k OBO. Chris, x34561 or 480-3859.

'85 17.5' McKee Craft, offshore model 150HP Johnson O/B, ex cond, Sportsman trlr, \$7k nego. Jody Nealy, 409-935-1739.

22.5' SeaRay Cuddy Cruiser, 228HP Mercruiser I/O, Color Furuno, VHF, ex cond, \$8.5k. Mark, x38013 or 992-4132.

### Today

**Flu shots** — The JSC Clinic will offer influenza vaccines from 10 a.m.-noon and 2-3:30 p.m. through Jan. 31. For more information, call the clinic at x34111.

**Cafeteria menu** — Special: breaded outlet. Total Health: crispy baked chicken. Entrees: baked chicken, beef chop suey, smoked sausage and German potato salad, French dip sandwich. Soup: cream of broccoli. Vegetables: okra and tomatoes, peas, navy beans, baby carrots.

### Tuesday

**Data seminar** — Iotech and Data Marketing will host a seminar on Visual Basic data acquisition applications from 8:30-11:30 a.m. Nov. 2 in Bldg. 111 conference center. For information, call Dean DesJardins at x34132.

**Cafeteria menu** — Special: fried chicken. Total Health: vegetable lasagna Entrees: Salisbury steak, steamed pollock, vegetable lasagna, French dip sandwich. Soup: split pea and ham. Vegetables: mixed vegetables, French cut green beans, pinto beans, vegetable sticks.

### Wednesday

**Russian speakers** — Practice Russian language skills from 11 a.m.-1 p.m. Wednesdays in Bldg. 3 cafeteria. For more information, call Jack Bacon at x38725 or Amy Mendez at x38066.

**JAS meets** — JSC Astronomical Society meets from 12-1 p.m. Wednesday in Bldg. 31, Rm. 129. Dr. Walter Kiefer of LPI will discuss geophysics of Venus. For more information, call Al Jackson at 333-7679

## Dates & Data

**Cafeteria menu** — Special: stuffed bell pepper. Total Health: stuffed bell pepper with creole sauce. Entrees: fried catfish with hush puppies, stir-fry chicken and rice, wieners and beans, Reuben sandwich. Soup: seafood gumbo. Vegetables: buttered rice, Italian green beans, corn O'Brien, peas and carrots.

### Thursday

**Russian Speakers** — Practice Russian language skills from 11 a.m.-1 p.m. Thursdays in Bldg. 3 cafeteria. For more information, call Jack Bacon at x38725 or Amy Mendez at x38066.

**Cafeteria menu** — Special: barbecue smoked link. Total Health: roasted turkey breast. Entrees: turkey and dressing, beef stroganoff, chopped sirloin, French dip sandwich. Soup: tomato Florentine. Vegetables: Lima beans, buttered squash, Spanish rice, oriental vegetables.

### Friday

**AFCEA nominations** — The deadline for nominations for the Armed Forces Communications and Electronics Association Distinguished Young AFCEAN award is Nov. 5. For more information, contact Becky Nolan, at 703-631-6170.

**Cafeteria menu** — Special: meat sauce and spaghetti. Total Health: spaghetti noodles with turkey meat sauce. Entrees: rainbow trout, liver and onions, been cannelloni, pork and shrimp egg roll, Reuben sandwich. Soup: seafood gumbo. Vegetables: steamed broccoli, breaded okra, cut corn, black-eyed peas.

### Monday

**Cafeteria menu** — Special: turkey

and dressing. Total Health: herb flavored steamed pollock. Entrees: breaded veal cutlet, beef chop suey, steamed pollock, beef cannelloni, French dip sandwich. Soup: beef and barley. Vegetables: Brussels sprouts, mixed vegetables, egg plant casserole, winter blend vegetables.

### Nov. 10

**JAS meets** — JSC Astronomical Society meets Wednesday from 12-1 p.m. in Bldg. 31, Rm. 129. For more information, call Al Jackson at 333-7679

### Nov. 17

**NCMA conference** — The Space City-Houston Chapter presents its fall educational conference Nov. 17-18 at the South Shore Harbour Resort and Conference Center. For more information, call Carolyn Moe at x34158.

**PSI meets** — Clear Lake/NASA Area chapter of Professional Secretaries International meets at 5:30 p.m. Nov. 17 at the Holiday Inn on NASA Road 1. For more information, contact Elaine Kemp at 30556.

**JAS meets** — JSC Astronomical Society meets from 12-1 p.m. Wednesday in Bldg. 31, Rm. 129. For more information, call Al Jackson at 333-7679. Dr. Tomasz Stepinski of LPI will discuss evolution of protoplanetary disks.

### Nov. 18

**IEEE meets** — Galveston Bay section of the Institute of Electrical and Electronics Engineers meets at 11:30 a.m. Nov. 18 at the Gilruth Center. Dr. Mitch Eggers will speak on Genosensors—Microelectronic for Medicine. For additional information, call Barbara Nepveux at x30194.

'87 Four Winn 16', skiing hook, trlr, ex cond, \$6.5k. Eloina or Roger, 280-1743 or 992-1781.

### Cycles

'83 Honda moped, less than 2500 mi, ex cond, \$600. Jim, x38624 or 475-9671.

10 spd Fuji touring bike, ex cond, \$75, Mark, x38013 or 992-4132.

### Audiovisual & Computers

Tandy 1000 TL-2 computer, enhanced kybd, RGB color monitor, delux joystick, 2400 baud modem, 3.5" and 5.25" FDs, all manuals, \$400. x37954 or 331-8310.

Portable stereo w/cass palyer, \$250 OBO. Trudy, x35106 or 333-6688.

Radio Shack color computer, coco disk drive, multipack, X-pad graphics tablet, modem interface, tapedeck, SW, two boxes of related books and magazines, \$200 OBO. x36647 or 666-7440.

Two linear phase 8812 speakers, new in boxes, were \$1.6k, now \$550. Jim, x45221 or 440-0540.

Original IBM PC w/HD and FD, green screen, SW, everything works, \$150. John Erickson, x32902 or 488-1901.

Macintosh 140 Powerbook, 6 MB RAM, 40 MB HD w/compression, SW, extra battery, SCSI cable, tools carrying case, \$1.3k. Jim, 335-2539 or 474-2368.

Comodore 64 computer, color monitor, printer, modem, SW, \$300, will sell individual components. Bob, 283-1193 or 326-5616.

### Photographic

Nikonis 103 underwater flash and camera mount, bag incl, ex cond, \$250 OBO. 282-6909.

Bronica S2A medium format camera, 6 x 6, 3 Nikkor lenses, 50mm, 80mm, 135mm, 120 film back, \$1k. Kevin, 283-1296 or 532-1409.

### Pets & Livestock

Kittens born 9/19, avail 10/31, 2 litters, tabbys or orange/white, free. Tom or Laura, 946-0681.

Beagle mix puppy, 6 mo, fem, white/brown spots, friendly, free. 333-2395.

Female kitten found 10/14/93 in Bldg 1/4 parking lot, app 4 mo old, mostly white w/ calico markings, looking for owner. x48616 or 529-1040.

### Musical Instruments

Wurlitzer Fun Maker organ, \$300. Jim, x38624 or 475-9671.

Yamaha alto saxophone YAS-23, good cond, \$600. x47698 or 482-3696.

Yamaha bass amplifier, 50 watts, good cond, \$200. x40046 or 286-4911.

Beusch trombone for beginners, good cond, 17 yrs old, \$75. x40046 or 286-4911.

### Household

Solid pecan bedroom suite by Dixie, contemporary style, qn mattress/hdbd, 2 end

tables, tripple dresser w/mirror, \$1.2k; sectional sofa, 2 pieces, rust color, \$150; ratan coffee table and end table w/smoked beveled glass. Karen, 282-4141.

Bassett baby crib w/mattress, ex cond, \$100 OBO; kitchen microwave cart w/storage, \$25. Richard, x31488.

Solid wood microwave stand, \$45; solid wood coffee table, \$35; solid wood butcher block, \$25. 333-6573 or 488-4813.

Couch, chair and ottoman, matching earthtones and wood, good cond, \$300. 487-1119.

Contemporary BR set, ex cond, hdbd, mattress, box springs, armoire, double dresser, night stand, was over \$1.6k, now \$800; antique pedal sewing machine w/attachments, ex cond, solid oak, works, \$250. 286-0964.

Woman's dresser, full sz bed, box spring and mattress, nightstand, \$300. x33734.

Massaging brown recliner, \$50. Sue, 480-5027.

### Wanted

Want female to share 3 BR house w/2 other girls, smokers welcome. Anna, 280-9800.

Want nonsmoking college roommate to share expenses, \$275 rent, \$100 util. 474-4905.

Female looking ro male workout partner for serious bodybuilding at Workd Gym on weekdays. Ann, x35974.

Want to buy compact disc Walkman in good cond, prefer Sony, will consider others; also want bench stepper w/w-o tape. x37796.

Want '92 or '93 4 dr Honda Accord LX, less than 12k mi or '93 Toyota Camry LE, 282-4972 or 536-1610.

Want to buy tiwin sz rollaway bed. Bob, x30825 or 998-7372.

Want nonsmoking lady to rent furnished room in CLC; want bicycle helmet for 4 yr old. 480-3424.

Want headboard for boy's qn sz bed; want dual axle 16 ft lowboy trlr. Herman, x35095 or 409-398-2461.

Want risers for van pool, West Loop Park and Ride to JSC. Richard Heetderks, x37557.

### Miscellaneous

Two tickets to Fiesta Texas Park, San Antonio, good through 11/7/93, \$13 ea. x30486.

Smith Corona typewriter w/spell right dictionary, \$95; Eureka canister vacuum, \$45; Technics speakers, model SB-K915, \$75; cross country ski exerciser, \$10. 334-1119.

Fiberglass camper top for long/wide bed Ford truck, good cond, \$450. Jim, 929-7358 or 286-9632.

After Five dresses, blk, sz 7 to 12, \$25 to \$50; full length formals, blue, red, plum, green, fushia, sz 7 to 14, \$50 to \$75, all ex cond. Becky, x31033 or 286-9632.

Northwest Airline ticket, good through

July '94, anywhere NW flies, \$650, three tickets avail. x48732.

Rollerblades and accessories, sz 9, ex cond, \$125 OBO. Trudy, x35106 or 333-6688.

Stair step exerciser, ex cond, computerized workout, \$50. R. Jones, x33750.

Grayco Premier stroller, ex cond, unused, was \$159, now \$80. 486-1469.

Fly to London and return from Paris next summer, D-Day 50th anniversary, four group tickets, American, \$975per ticket, depart Dallas for London May 29, return from Paris June 11. Larry Griffin, 283-6000 or 486-5500.

Antique diamond ring, 1.8 ct, circa 1900, platinum w/36 surrounding diamonds, \$7.5k OBO. 332-6752.

Computer table, oak veneer, stained and finished, \$150 OBO. Allyson, x39318 or 486-4663.

Oilers vs Cleveland Browns, 4 tickets, Dec 10 game. Casey, x32943 or 486-5208.

Ajay exercise bike, digital readout, \$35. 474-3438.

Three Space Center Houston adult tickets, \$6 ea. 333-7126.

Ultra custom wheels from Nissan PU, white and chrome accents, 15x7, 3 yrs old, ex cond, 6 lugs, locks, \$350. x32113.

New Wards vertical blinds, 3.5" fabric w/valances, 78" w x84" l, peach, teal or white, 104" w x 84" l, teal, all attach H/W incl, were \$125 ea, now \$60 ea. Ed, 481-4889.

Infant's car seat/carrier, \$35; stroller, \$25; walker, \$25; portable crib, \$40; boys and girl's scooters, \$15 ea; motorcycle rainsuit, \$30 OBO. x35896 or 488-7982.

Soloflex, \$300. x32137.

Selfpropelled vacuum cleaner, \$50; Grayco delux 2-seater infant/child's stroller, ex cond, \$50; pink umbrella stroller, rarely used, \$25; set of sm stereo speakers, \$20. Ed, 481-4889.

Dorm refrigerator, ex cond, \$85; 14 intri-or doors, some hardware, \$3/door; rubber cargo king mat and tail gate cover for full sz PU, \$35. Ken, x35999 or 486-5432.

GEO 370 Roadmaster exercise bike, ex cond, rarely used, was \$150, now \$85. Bill, 282-2830 or 996-1067.

Craftsman riding lawnmower, 30" deck, 8 spd, 11HP, \$575



### The roster of teams for the fall season

#### The Blue 40

Don Williams, manager  
Jerry Swain  
Joe Perez-Rocha  
Robert Kinsey  
Paul Hart  
Dennis Galvan  
Drew Bell  
L. Ray Dunn  
Hilton Varrett  
Jim Allen  
Ron Dockal

#### Draft Codgers

Mark Powell, manager  
Lee Etheridge  
George Finley  
Gret Weaver  
Garry Zoerner  
Lee Foster  
Allen Wheeler  
Junior Villareal  
Ron Isaac  
Troy Stewart  
Frank Hernandez  
Greg Boyd  
Ron Smith  
Bob Danson

#### Blue Ringers

Morris Williams, manager  
R. Ballner  
Steve Hawkins  
Robert Munoz  
Dennis White  
M. Winkleman  
W. Allen  
J. Martinez  
Don Martin  
Leon Jenkus  
Lewis Little  
Bill Chavez  
Bobby Houck

#### Ravels

Ron Davis, manager  
Leroy Penn  
Larry Hartley  
Bob Merriam  
Dave Hanson  
Dallas Ives  
Lynn Wagner  
Larry Gana  
Ken Young  
Daryl Lostak  
Harry Kolkherst  
Stu Grissom

#### Unknown Energy

Clarence Schultz, manager  
Conrad Matysiak  
Tom Smothers  
Larry Cargill  
Rob Purkiewicz  
Terry Hodges  
Will Miller  
Dave Bishop  
Kenny Ott

#### Mets '93

Al Morrey, manager  
John Allen  
Richard Kruse  
Mickey Donahoo  
Steve Hawley  
Nat Hardee  
Rich Holtje  
John Martinec  
Jim Pawlowski  
Larry Ratcliff  
Gene Ricks  
Jim Smith  
Wayne Whittington  
Bailey Corbett  
Dan Brandenstein  
Jack Boykin  
Nick Lance

# Reliving the glory days

## Men's over-40 softball league rekindles competitive fire for JSC's boys of summer

By Eileen Hawley

The 1993 baseball season is over and the Mets '93 won it all. Oh, you thought it was the Toronto Blue Jays winning the World Series on the field at Skydome?

Not at all. The real competition was last Monday on the JSC softball fields when Mets '93 and the Blue Ringers met to decide the championship of the Men's Over-40 softball league.

There's nothing all that unusual about 40-year-old men playing baseball is there? After all, Nolan Ryan did it. So did Charlie Hough. And even Phillies' pitcher Larry Anderson did it in the World Series.

But Ryan, Hough and Anderson are professional athletes and the men taking the field at the Gilruth Center on Monday nights are not. These over-40 ball players are engineers, managers, financial officers, scientists and astronauts. They come from several different directorates and disciplines within JSC with one common goal in mind: winning.

The men's over-40 softball league is a recent addition to the list of Gilruth Center activities and developed to allow JSC's well-seasoned players an opportunity to play against other softball veterans and relive their glory days.

In its inaugural season this summer, the league had five teams: Al Morrey's Mets '93; Morris Williams' Blue 40's; Ron Davis' Rats; Leroy Penn's Marvels and Mark Powell's Draft Dodgers. The odd number of teams meant that every week somebody played a double-header. That season ended with Mets '93, managed by Al Morrey, emerging as league champions.

With six teams registered for the fall league, the need for double-header games was eliminated. The six teams were: Mets '93 managed again by Al Morrey; The Unknown Energy managed by Clarence Schultz; The Draft Codgers managed by Mark Powell; the Blue Ringers, managed by Morris Williams; The Ravels managed by Ron Davis and the Blue 40 managed by Don Williams.

The regular season for the fall league ended Oct. 18 with the Blue Ringers and Mets '93 tied for first place.

The four teams qualifying for the playoffs were the Blue Ringers, the Draft Codgers, Blue 40 and the Mets '93.

There was a need for this league according to many of the players. "We still wanted to play and be competitive with people at our own level," Morris Williams said. "We still like winning. The competitive fire

burns even if we don't run as fast or jump as high as we used to."

For most players, the league is recreational and a chance to play again with old friends. Mets '93 is made up of "guys who played together in very competitive leagues in the 70's, but hadn't played in 12 years," manager Morrey said. Without exception all the old team members accepted Morrey's invitation to play together again as part of the Men's Over-40 league.

The over-40 league has renewed more than old friendships. Morris Williams says the games "have renewed a lot of old rivalries since many of us competed against each other 15-years ago."

Ron Davis agrees that the friendship between players is an important part of league play. "There is more camaraderie playing with people of the same general age and ability. Most of the teams are there to have fun and everyone on the team gets a chance to play." Each team fields 10 players who rotate playing time so that everyone gets in on the fun and action.

The next Men's Over-40 season begins in March. Participation is limited to men over 40-years-old who are JSC employees or NASA-badged contractors. For more information on joining the Men's Over-40 softball league, contact Christine Jowid at x35789. □



Top left, Blue Ringers captain Morris Williams takes aim on a pitch. The catcher is Mets '93 team member Wayne Whittington. Top right, Bill Chavez accepts "high fives" from his teammates after scoring a run. Behind him is team captain Morris Williams. Mets '93 catcher Wayne Whittington, background, waits for the next pitch. Lower left, Steve Hawley of the Mets '93 takes his turn at bat and hits a line drive. Above, Mets '93 pitcher Jack Boykin lays in a pitch during a recent game of the Men's Over-40 softball league.

# Asbestos more a worry than problem

That strange chunk of what looks like gray fireproofing material which mysteriously appeared over night on the office floor could be asbestos and potentially hazardous to your health.

But not to worry. If properly handled, the asbestos poses little risk to employees, Richard Waters, asbestos coordinator for the Environmental Services Office, advised.

"Many employees do not always understand about the true nature of the hazards associated with asbestos, and they become unnecessarily alarmed if they come in the morning and find an asbestos spill," Waters, a Johnson Controls contractor, said.

Asbestos is a naturally occurring fibrous mineral that has been used extensively because of its insulating properties. Many building codes

specified its use before the substance was banned for construction purposes in 1973.

Asbestos poses no health risk unless it is disturbed and the fibers become airborne. Contractors who routinely work around asbestos materials must be trained and take precautions to prevent damaging the material.

"Occasionally, an individual might be in a hurry and get distracted. That's typically when we have problems," Waters said.

Visible debris needs to be cleaned up because it could become airborne. But if you find an asbestos spill, don't panic.

"Call the Environmental Services Office and

we will come and clean it up immediately. We will not let employees back into the area until we are certain that it is safe for reoccupancy," Waters said.

Although asbestos exists in some buildings, JSC asbestos control measures exceed those required by law.

"The Occupation Safety and Health Act sets permissible exposure levels for airborne asbestos. JSC has 20 times more stringent controls than the OSHA regulations for unprotected workers," he said.

In addition, ambient air tests for asbestos traces in offices are conducted regularly by Kelsey-Seybold, and JSC scores well below the allowable limits, he said.



**Earthwatch**

## Rockwell contract extension signed

JSC has signed a supplemental agreement with Rockwell International Corp. for work on the space shuttle external tank disconnect assembly, production and delivery program. The supplemental agreement calls for extending the work being done to 1997.

This additional effort, valued at an approximate cost of \$40 million, brings the estimated cost of the production portion of the Rockwell contract to nearly \$5.1 billion.

Rockwell performs the majority of the work on the space shuttle orbiter contract at its Downey facilities.

## Jazz evening slated

An evening of fine dining and contemporary jazz is set for Saturday, Nov. 13 at the Gilruth Center.

The evening features a performance by "FlashPoint," a contemporary jazz ensemble comprised of local aerospace employees, and begins with a social hour at 7 p.m. A special dinner of flounder del rey, vegetables and german chocolate cake will be served at 8 p.m. The band performs from 9 p.m.-midnight.

Special table arrangements will ensure that all guests can see and hear the band. Tables can accommodate either six or twelve guests in an open seating arrangement.

Tickets for the event are available through the Bldg. 11 Exchange Store beginning Wednesday and remain on sale through Nov. 10. Cost for the dinner and concert is \$15 per person.

For additional information, call Mike Gaudiano at x38318.

## Contractor's son needs medical help

The 9-year-old son of Inez Chagolla, a DMS maintenance worker at JSC, recently lost his leg in a train accident, and her coworkers are organizing help to cover the boy's medical expenses.

Chagolla is a single mother of five children whose only means of transportation is a bike or the metro, her supervisor Lydia Traylor said.

"I hope people will find it in their hearts to help her," Traylor said.

Donations to help Inez Chagolla should be sent to Lydia Traylor at JJ14. For information call Traylor or Shelia Popillion at x39564.

## Benefits open season begins next Monday

The open season for enrolling in or changing health plans in the Federal Employees Health Benefits Program begins Nov. 8.

Employees may change from one health plan to another, change enrollment options, or any combination of these changes during the open season which runs from Nov. 8 through Dec. 13. Plan changes and new enrollments become effective Jan. 9.

Health plan representatives will participate in a Health Fair from 9 a.m.-4 p.m. Nov. 22 at the Gilruth Center to discuss 1994 health benefit programs and options.

For additional information, contact Employee Services at x32681.



**OH POSSUM!** — A young male possum surveys the scene at JSC from a tree between Bldgs. 7 and 8. The possum was subsequently captured by Cindy Isaacson of Four Seasons Services Inc., JSC's grounds contractor. Isaacson later released the possum in the open fields near a bayou in Bay City.

JSC photo by Jack Jacob

## NASP gets new life with 1994 budget

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\$1.9 billion to keep the redesigned space station on track. However, NASA can only spend \$1.1 billion of station funds before the end of March when Congress will review the program's progress and determine whether or not to release the rest of the station appropriation.

The NASA appropriation includes \$2.8 billion for space shuttle operations, a \$220 million reduction from requested funds. Shuttle production receives \$972 million in 1994—down from the 1993 budget of \$1.53 billion—for orbiter operational capability, propulsion systems, launch and mission support, and safety and obsolescence upgrades. Most of the 1994 shuttle production cuts were ASRM related.

And the shuttle alternate fuel pump will get no new start next year.

The spending bill passage came after weeks of congressional dispute regarding the fate of the ASRM. Last month, the House of Representatives amended the House-Senate conference committee appropriations bill to delete an additional \$57.5 million from the

ASRM program. In each of the past two years, the House has voted to cut the ASRM, but the Senate restored funding both times. This year, however, the Senate, by voice vote, approved the House-amended version that provided \$100 million for ASRM termination costs only.

The National Aerospace Plane, which previously had been zeroed out in the budget, received \$20 million that was redirected from the ASRM termination.

The HRMS program, which had begun full-scale operations in 1992 to listen for signals of intelligent life in the universe, was completely axed from the bill.

Congress significantly scaled back the mission of AXAF, cutting \$19 million for AXAF-S and requiring the space observatory's principle instrument to fly instead on a future Japanese ASTRO mission.

President Clinton is expected to sign the VA, HUD and Independent Agencies appropriation bill, which includes NASA funding, by early this week.

## Space News Roundup

The Roundup is an official publication of the National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, and is published every Monday by the Public Affairs Office for all space center employees.

Editor ..... Kelly Humphries  
Associate Editor ..... Kari Fluegel

## Correction

In the Oct. 25 Roundup, the published launch time for the STS-58 mission was incorrect. The official STS-58 launch time was 9:53 a.m. CDT on Oct. 18.

## Win a trip to Hong Kong at the JSC Travel Expo

Wondering where to spend your next holiday? Find the perfect vacation spot at the Travel Expo being held from 4 to 8 p.m., Nov. 8 at the Gilruth Center.

The Employee Activities Association and JSC's personal travel office, Omega Travel and Vantage Travel, have brought together representatives of major airlines, cruise lines, hotels, tours and rental companies to showcase vacation ideas.

Music, snacks and door prizes will contribute to the festive feel of the Travel Expo. One lucky guest will win the grand prize of two round-trip tickets to Hong Kong. Tickets are required for entry to the expo and are available at no cost from the Bldg. 11 Exchange Store today through Friday.

JSC employees and NASA-badged contractors must present their ticket and badge at the expo to be eligible for the grand prize drawing. The grand prize will be awarded at 6:30 p.m. and the winner need not be present to win.

For more information, call Richard McMinimy at x34037.

## NASA technology helps pilots fly through storms

A new NASA-developed technology that provides airline pilots with computer graphics of storm locations and alternate routes may save airlines \$6 million per year.

The Cockpit Weather Information Network combines several commercial data sources to create radar maps of storms, lightning and surface observations. The information displayed indicates intensity and location of storms and can provide historical storm data. Pilots have the ability to replay the five most recent maps of storms, lightning and surface observations to assist in making decisions about alternate flight routes based on how weather systems are developing or dissipating.

Pilots have problems receiving and evaluating timely weather information during flights. Onboard radar can not "see" more than 150 miles out or through large thunderstorms and traffic controller transmissions still require the pilot to determine the true size of the storm cells and their relation to the plane's flight path.

With CWIN, pilots can be provided with storm intensity and location as well as their actual flight path and possible alternate routes. In simulations from March to July, pilots on 14 flight crews from America West, Northwest, United, USAir, Boeing and Honeywell burned less fuel and flew fewer miles to avoid bad weather by using the CWIN system.

With planes being required "to fly around storm hazards about once every 13 flights" the issue of fuel consumption and flight time is real says Charles Scanlon of Langley Research Center. "We believe the fuel, distance and time savings from a system like CWIN would cut a typical airline's operating costs by \$5.9 million annually."

The CWIN technology is being adapted for the general aviation market as several aviation companies are marketing a cockpit weather system called WxLink that uses several CWIN features, including lightning graphics and ground-based radar summaries. WxLink sends weather data to an aircraft and accepts automatic pilot reports of weather conditions. The pilot reports, then, are sent via satellite to the National Weather System where other weather users can access them.

CWIN was developed by the Critical Technologies Division of the NASA Office of Aeronautics.

## STS-58 expands knowledge

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roughly equivalent to two months for humans. Using rodents in experiments to measure the changes in the musculoskeletal system approximates the effects of microgravity on human muscles over a long space mission.

Data collected from fluid-electrolyte and blood volume regulation experiments, which measured the redistribution of fluids caused by a microgravity environment, can be applied on Earth to find countermeasures for conditions such as high or low blood pressure and cardiac failure. Crew members also measured changes in their heart size and function to measure cardiac deconditioning experienced in microgravity.

Results of experiments conducted on the SLS-2 mission are expected to be applicable to cardiovascular and hematologic disorders, such as hypertension, heart failure, and anemia, and to contribute to the understanding of bone diseases such as osteoporosis, muscle disorders, and the roles of force and pressure on the musculoskeletal system's structure and metabolism.

## CFC drive under way

(Continued from Page 1)

will be eligible for a drawing for a free round-trip Continental airline ticket to anywhere in the mainland United States or for a three-month reserved parking space on-site. The drawings for one free airline ticket and one reserved parking space will be held once-a-week for three weeks during the campaign, and employees who complete their pledge cards early would have a greater opportunity to be selected, Sullivan said.